Field Reports

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IDENTIFICATION OF THE RI THROUGH FURTHER FIELDWORK IN NEW IRELAND, PAPUA NEW GUINEA

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INTRODUCTION

In February, 1985, the author and twelve others from the Ecosophical Research Association (ERA) conducted fieldwork in Papua New Guinea, principally along the east coast of southern and central New Ireland Province. The purpose of the fieldwork was to continue investigations into reports of an unidentified marine animal variously called *ri* (in Barok), *ilkai* (in Susurunga), or *pishmeri* (in New Guinea Pidgin) by the native peoples. Previous reports and the results of earlier fieldwork had proved inconclusive (see Roy Wagner, 1982, The *Ri*—Unidentified Aquatic Animals of New Ireland, Papua New Guinea, *Cryptozoology,* Vol. 1: 33–39; Roy Wagner, J. Richard Greenwell, Gale J. Raymond, and Kurt Von Nieda, 1983, Further Investigations into the Biological and Cultural Affinities of the Ri, *Cryptozoology,* Vol. 2: 113–125).

The work of the expedition undertaken by Wagner *et al.* in 1983 produced visual observations that were consistent with information provided by Barok and Susurunga natives, but did not correspond unambiguously with the known behaviors of familiar marine mammals, such as cetaceans or sireneans. Photographic results of the previous expedition were also inconclusive. There was, however, enough hard evidence of an unidentified mammal that they considered further investigation, and even another expedition, to be warranted, and they recommended that such a new expedition be equipped with better photographic gear and a powered boat.

It was decided by ERA that a powered boat was indispensable, as it would provide a direct access by sea to the animal's habitat, as well as serve as a

mobile base of operations. To utilize an adequate vessel, however, it was necessary to sail it from Port Moresby, capital of Papua New Guinea, to the site of the investigation, a distance of over 1,000 miles. The boat chartered was especially equipped for diving operations. The TSMV *Reef Explorer* is a 65-foot, twin-screw motor vessel with radar, side-scan sonar, satellite navigation, ship-to-shore radio telephone, and an air station for filling scuba tanks. In addition to standard photographic equipment, it was decided to include a video crew with adequate surface and underwater video equipment.

After discussing the advisability of trying to capture an animal, it was decided to rely solely on photographic and video evidence. If we were successful in establishing the existence of a new species of marine mammal, we knew it would be vital to work closely with the Papua New Guinea government. Contact was established with the Provincial Premier, Mr. Robert Seeto, who expressed interest in our findings and requested a written report on our activities.

Narrative Description

Starting with our departure from Port Moresby and during our journey along the southern coast of Papua New Guinea to Milne Bay, at the eastern tip of the New Guinea land mass, we encountered numerous accounts of "mermaid-like" creatures, which, the people insisted, were a combination of a human (in most accounts female) head and torso with a "fish-like" tail. Reports ranged from very realistic sounding accounts to stories containing obvious elements of folklore. One individual, for instance, held that throwing garbage overboard would anger the *pishmeri.* Curiously, no stories of merfolk were encountered during a stop in the Trobriand Islands, although the Trobrianders are well known as sea-faring people. On February 10, 1985, the *Reef Explorer* arrived off Cape St. George, at the southern tip of New Ireland island. The boat anchored in Louisa Bay at about 5:30 a.m., and a watch was set to look for any evidence of the Ri. No sightings were made in Louisa Bay, and it was decided to move on towards more promising sites, such as where earlier observations by the Wagner team had been made, in Nokon Bay. En route, several members went ashore for a short time at Muliama Harbor, and talked with the local people about Ri stories. The natives were quite familiar with the animal, and called it by its Pidgin name, *pishmeri.*

The *Reef Explorer* arrived at Nokon and dropped anchor in the bay at 1:45 p.m. Almost immediately, at 2:00 p.m., two expedition members, Morning Glory Zell and Rich Bergero, sighted the flukes of an animal above the water on the south side of Nokon Bay. At first, they looked like the flukes of a small whale, but subsequent observations caused that impression to be modified. Observations were made from 2:00 p.m. until about 5:30 p.m., from both the surface and, once, from underwater. Surface observations revealed flukes or a rolling back, often with a head visible. The animal appeared to surface in periods ranging from 8 to about 11 minutes, which

is consistent with the observations by the Wagner team. In addition, another distinctly smaller individual was sighted. When the animal's back broke the surface, it had the appearance of a sharp, quick roll, with no visible dorsal fin.

Attempts to photograph this activity with still cameras were disappointing. It was possible, however, to get some excellent results from the beach using the video equipment. Our observations and video footage confirm the observations by Wagner and Greenwell of extreme vertical flexure, and flukes appearing above the surface during a dive.

The display of the flukes was quite spectacular. At times, the flukes would appear above the water in a graceful, sweeping motion until the tail was completely vertical. The ends of the flukes would flop over or droop slightly as the tail slid beneath the surface. The color of the tail appeared brown, but somewhat lighter at the edge. Most surface sightings were made from the boat, which was anchored in the approximate center of Nokon Bay. The animals were always observed on the south side of the boat, and to the left of the small point at the end of the bay (Fig. 1).

About that time, a native called Tom Omar approached the *Reef Explorer* in a rowboat. When asked about the Ilkai, he pointed to a tail that was just breaking surface and exclaimed: "Ilkai, Ilkai, em i stap!" ("There it is"). He then went on to describe the female as having a woman's face, hair, hands, and breasts, saying that there was a family living in the bay: a male, a female, and a child. During the conversation, the animal was displaying the rolling back and tail activity described above.

The first underwater observation was made by the Captain of the *Reef Explorer,* Kerry Piesch. At about 3:30 p.m., Captain Piesch set out from the boat with fins and snorkel and a small underwater camera. He was accompanied by expedition member Bergero. Shortly thereafter, Capt. Piesch signalled that he had observed and photographed the animal underwater. On returning to the *Reef Explorer,* Capt. Piesch gave a description of what he had seen, which is summarized below:

Length was approximately 5 to 5½ feet, and the color appeared a greenish-gray underwater. There was a distinct head that joined to the body with no discernible neck. The forelimbs were short and paddle-shaped, but the face could not be seen clearly from the observer's position. The hindquarters tapered off and rounded in a very streamlined shape, ending in the tail described above. The forelimbs showed no evidence of hands or fingers, but ended in what appeared to be three lobes. The animal, which resembled a dugong, moved easily, with graceful undulations of its tail, and Capt. Piesch was able to take three photographs before he had to come up for air. He noted that, when the animal saw him, it moved away, but did not seem unduly alarmed.

The morning of February 12 produced still more observations. Expedition members Munro, Hill, Wood, and Bergero set out in the dinghy with video

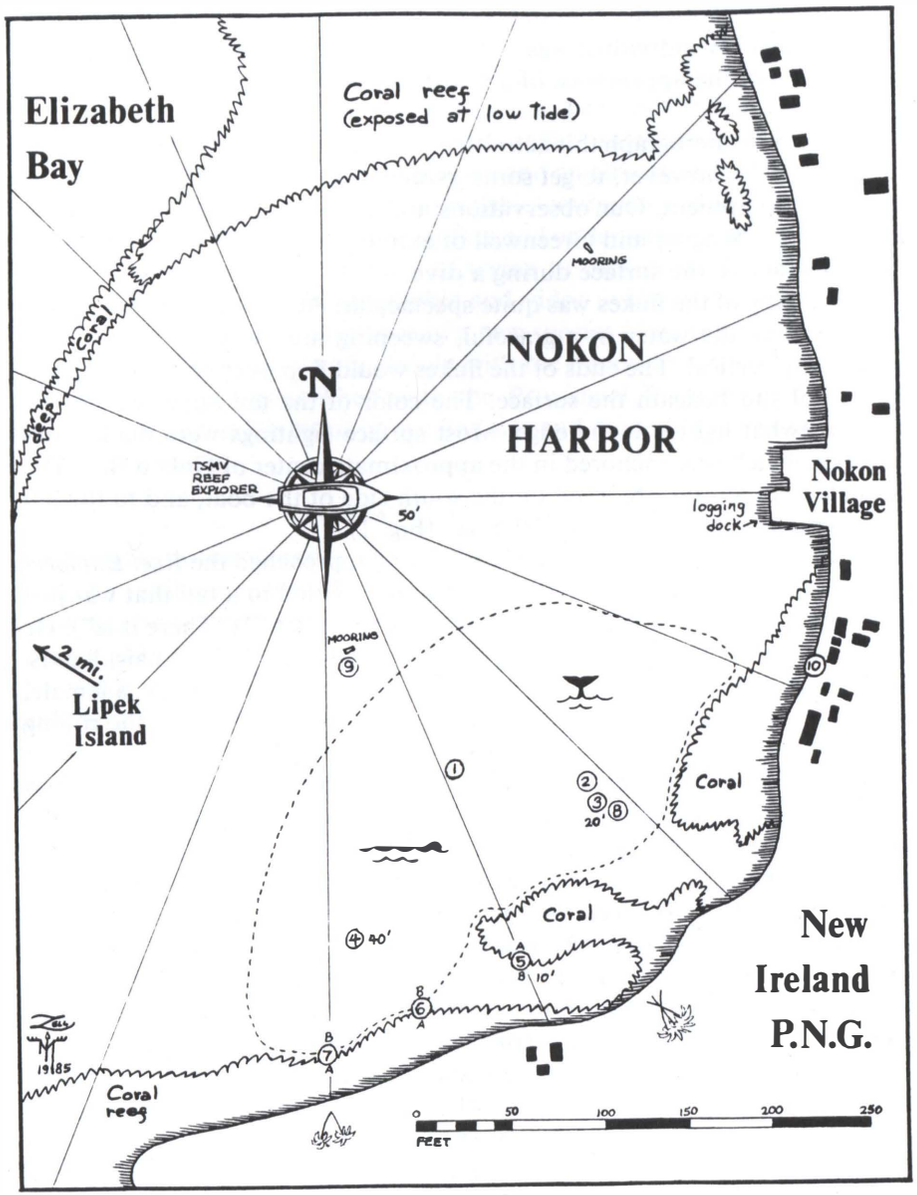

FIG. 1.—Map of Nokon Bay by Otter Zell. Dotted line represents general area of observed surface activity. Numbers 1, 2, 3, and 4 represent sites of actual recorded surface observations. Numbers 2 and 3 also represent sites of underwater photography. Number 4 represents the site where feeding furrows in the bottom sand were found. Numbers 5, 6, 7, and 8 represent sites where vegetation was collected.

FIG. 2.—Dugong photographed underwater during feeding activity in Nokon Bay. Photograph was taken shortly after observation of surface activity. (Photo: Rich Bergero.)

gear to set up on the south beach of the bay. While stationed there, they were able to record several surfacings of the type described above. A light rainstorm came up at this time, and Bergero, who had remained in the dinghy with the first mate, started to paddle toward the camera crew on shore. He then went into the water with fins, snorkel, and camera, leaving the first mate to pick up the shore party.

Bergero and Weber, who had also gone into the water with a camera, were able to obtain underwater photographs of the animal (Fig. 2). Bergero seemed convinced that he had seen a dugong. Weber tended to agree, but they differed as to whether the tail was the same as had been observed on the surface. Both, however, noted that the animal, when observed, had been nuzzling with its snout in the sandy bottom of the bay, making a furrow as it went. It would furrow a little ahead, then back off a bit and dig into the furrow, then continue forward. On seeing two divers approaching from different directions, the animal became alarmed, and it retreated.

Since the animal appeared to be in the habit of coming into the bay to feed only in the mornings and afternoons, no further observations were made until about 3:00 p.m. that day. More surface activity began at that time, and an attempt was made by the video team to get some video footage of the animal underwater. This attempt was not successful due to the bulky nature

FIG. 3.—Field sketch by Daniel Blair of vegetation found in dugong feeding area (sandy bottom, 40–50-foot depth), and in mouth and stomach of dead dugong.

of the video equipment in the small dinghy, and unfavorable wind conditions. During the attempts to videotape the animal underwater, the rolling motion and tail fluke activity was observed from the *Reef Explorer,* but the

crew was never able to be in the right place at the right time to obtain photographs. After this attempt, it was decided to pursue diving activities elsewhere on the following day, in order not to unduly harass the animal.

On the morning of February 14, divers with scuba gear surveyed the bottom of the bay in the area where the animal had been seen feeding, in an attempt to see what kind of vegetation or shellfish it was eating. Traces of furrowed marks were seen and photographed on the sandy bottom, along with a small bottom plant. Samples of this plant were collected and photographed for later identification. The association of this plant (Fig. 3) with the furrowed marks indicates that it was the animal's primary food source in the bay. No evidence of sufficient shellfish for the diet of such an animal was found in the feeding area. A second attempt to obtain video footage of the animal was also unsuccessful.

The morning of February 15 brought an abrupt end to activities at Nokon. Early in the morning, some villagers were observed pulling a large animal out of the water onto the beach. When several expedition members got to the beach from the *Reef Explorer,* it was clear that the animal was an adult female dugong. She had apparently been killed by a single wound in the right dorsal portion of the body, slightly behind the right flipper. Subsequent internal inspection revealed that she had been shot by a high-powered rifle. While the bullet was not recovered, the chest cavity showed massive damage, such as can only be caused by a soft-nosed or hollow point rifle bullet. Further inspection also disclosed the plant observed in the feeding area in the animal's stomach and mouth. Exactly who had killed the animal or just when it had happened could not be determined.

Otter Zell retained the skull of the animal, hoping to take it back to the U.S. for positive identification. Permission to export the skull was, however, refused by officials in Madang.

RESULTS

The ERA expedition has had two major results. First, the Ri/Ilkai has been positively identified as the Indo-Pacific dugong, *Dugong dugon.* The combination of visual sightings, both above the surface and underwater, along with photograhic evidence and the unfortunate death of an animal at about the same time and place, make this conclusion inescapable. In fact, it is the consensus of expedition members that this same conclusion would have been reached if the death of the animal had not occurred.

Second, several new facts have been learned about dugong behavior, and these are related to the reasons that caused the members of the Wagner expedition to reject the dugong hypothesis, as proposed previously in this journal (see James G. Mead, 1983, Ri or Dugong?, *Cryptozoology,* Vol. 2: 161–162; John R. Sibert, 1984, Semantics versus Cryptozoology, *Crypto-*

zoology, Vol. 3: 144–145; John-Erik Beckjord, 1984, Ri Evidence Lacking, *Cryptozoology,* Vol. 3: 154–155). Specifically, these are: 1) the average submergence time observed by our expedition; 2) the observation of extreme vertical flexure of the animal's body at the surface; and 3) the display of flukes—all of which confirm the observations of Wagner and Greenwell (see Wagner *et al.,* 1983, above).

The observed average dive times of about 10 minutes conflict strongly with the approximately one minute dive times reported previously in the scientific literature (see Paul K. Anderson and Alastair Birtles, 1978, Behavior and Ecology of the Dugong *Dugong dugon* [Sirenia]: Observations in Shoalwater and Cleveland Bays, Queensland, *Australian Wildlife Research,* Vol. 5: 1–23). It should be noted that Anderson and Birtles' observations were made in water considerably shallower than that at Nokon. An inspection of the animal's bottom feeding area in Nokon Bay by the author and Robert Weber using scuba gear showed a depth of between 40 and 50 feet. Thus, the extreme vertical flexure observed in Nokon Bay may well be related to an additional submergence mode when the dugong is diving in deeper water, and it is then, it seems, that the dugong stays submerged far longer than that recorded previously in shallower water. These possibilities were hinted at by the Wagner team members themselves in the form of a personal communication from Anderson (see Wagner *et al.,* 1983, above).

Although the natives of Nokon traditionally never harm the dugongs in their area, there are plenty of tales of other people who hunt and eat the Ri, and even sell its meat in the markets. Whether these tales are part of a ruse to circumvent Papua New Guinea law protecting the dugong remains uncertain. There is strong indication, however, that, since the Ilkai—and thus the Ri—has been identified as the dugong, any hunting or dealing with the meat of such supposed "merfolk"-type creatures is, in reality, dealing with dugongs, and should be prevented, particularly since the dugong is listed as endangered. We have passed these observations on to the Provincial Government of New Ireland.

Future Plans

As a cryptozoological problem, the question of the Ri/Ilkai appears to be solved. Therefore, we have no plans for future fieldwork. We are pleased to have been able to solve such a problem, and hope that the results of our expedition may serve as an example for future cryptozoological field efforts. We also wish to express the hope that the dedicated, open-minded efforts of earlier researchers in the question of the Ri as a cryptozoological problem, which culminated in the results of our own work, will help enhance the acceptance of cryptozoology as a valid scientific pursuit.